

PART 13 - Public Telephone Services
SECTION 2 - Independent Payphone Provider Services

Original Sheet No. 2

1. CUSTOMER OWNED PAY TELEPHONE SERVICE (cont'd)

1.2 Responsibilities of the Customer

- A. The customer shall be responsible for payment of charges of all messages originating from or accepted at this type of service.
- B. The customer's terminating equipment must be suitably equipped in order to utilize COPTS Coin Line features. Such equipment must meet the following interface specifications:

Ameritech Coin Line Interface Specifications: AM-TR-NIS-000095

These specifications are available at no charge by sending a written request to:

Assistant Manager, Information Management
AMERITECH Services, Inc.
2000 West AMERITECH Center Drive
3A43E
Hoffman Estates, Illinois 60196

- C. No adjustment to the usage rates charged pursuant to 1.5 G following or any other refund will be made in the event of uncollected initial period or overtime coin charges applicable to end users.

1.3 Violation of Regulations

Where any customer-provided pay telephone is in violation of any provision of this tariff, with the exception of 1.4 following, the Company will promptly notify the customer of the violation and will take immediate action as deemed necessary in accordance with PART 2, Section 2, Paragraph 27, of this tariff.

1.4 Other Responsibilities of the Customer

The Illinois Commerce Commission has ordered that the following terms and conditions should be applicable to all customer owners of pay telephones used intrastate in Illinois. Where any customer-provided pay telephone is in violation of these terms and conditions, the Company will take action only as directed by the Illinois Commerce Commission.

- A. All customer-provided pay stations may be connected to the Basic COPTS access lines of the Company, provided that they have been registered by the Federal Communications Commission under PART 68, or are connected behind suitable registered protective connecting arrangements.

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1. CUSTOMER OWNED PAY TELEPHONE SERVICE (cont'd)

1.4 Other Responsibilities of the Customer (cont'd)

B. All customer-provided pay stations shall have the following minimum features:

- (1) Touch dialing.
- (2) Ability to access 9-1-1 Emergency Service (where available) and "O" operator ("O-minus") without prior insertion of coins or credit card, to place calls to public safety agencies (i.e., police, fire, rescue) or to access such agencies directly, without prior insertion of coins or credit card.
- (3) Compliance with statutes or rules concerning the use of said pay stations by disabled persons, such as handicapped in wheel chairs or the hearing impaired.
- (4) Ability to complete both local and long-distance calls (upon payment of applicable charges).
- (5) A program which would not limit the duration of a local message, so long as the user continues to pay applicable charges, through deposit of additional coins or otherwise.
- (6) An informational message in, on, or adjacent to each pay telephone (i.e., by voice recording, visual display, etc.) explaining the general operation of the pay telephone, dialing instructions for obtaining emergency assistance, the owner's name, the method of reporting service problems and the method of receiving a credit for a faulty call.

1.5 Monthly Rates and Charges

- A. Service Charges, as specified in PART 3, Section 1 of this tariff, apply in addition to other charges specified for Customer Owned Pay Telephone Service. If Ameritech ProfitMaster Service is purchased, the charges specified in PART 13, Section 2 of tariff ILL. C.C. No. 19, also apply.
- B. Access Line charges are applicable as shown in PART 4, Section 2, Paragraph 2, of this tariff.
 - (1) For the Basic COPTS Line, the charge for a Customer Owned Pay Line is applicable.
 - (2) For the COPTS Coin Line, the charge for a COPTS Coin Line is applicable.

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1. CUSTOMER OWNED PAY TELEPHONE SERVICE (cont'd)

1.5 Monthly Rates and Charges (cont'd)

- C. Touch-Tone charges are applicable as shown in PART 7, Section 5 of this tariff.
- D. Directory Assistance charges are applicable as shown in PART 12, Section 1 of this tariff.
- E. Enclosures
 - (1) Shelves and Pedestals provided by the Company with Customer Owned Pay Telephone Service will not be provided to new customers on and after June 15, 1986, except as specified in (2) following. Customers having Shelves and Pedestals on that date may continue to lease them at their present location as long as the equipment is maintainable.
 - (2) In the event that a booth or shelf is already in place with Semipublic Service or Public Service and the Company determines that such booth or shelf cannot be removed without significant expense to the Company and substantial structural damage to the customer's premises, such booth or shelf may be left in place with Customer Owned Pay Telephone Service at the applicable charges as shown in PART 13, Section 1, Paragraph 2.2 of tariff ILL. C. C. No. 19.
- F. Basic COPTS Line class of service.
 - (1) Except as specified in 1.1(B)(1)(a) preceding, usage rates for the Basic COPTS Line are the same as for Business Usage Service (where available) and for Business Message Rate Service (where available) as shown in PART 4, Section 2 of this tariff and of tariff ILL. C. C. No. 19, as appropriate.
 - (2) Local Area Pay Service for the Basic COPTS Line is provided only in those exchanges where Business Usage Service or Business Message Rate Service is not available. Except as specified in this paragraph and in 1.1(B)(1)(a) preceding, usage rates are the same as for Local Area Service as shown in PART 4, Section 2 of this tariff and of tariff ILL. C. C. No. 19. /1FY/

	<u>Per Mo.</u>
	\$28.00
 - (3) Where Business Usage Service is available, customers (COPTS providers) may instead select to participate in the COPTS Optional Local Network Usage Plan in according with Paragraph 1.5 H. following.

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1. CUSTOMER OWNED PAY TELEPHONE SERVICE (cont'd)

1.5 Monthly Rates and Charges (cont'd)

G. COPTS Coin Line class of service.

- (1) Except as specified in 1.1(B) (1) (b) preceding, usage rates for the COPTS Coin Line are the same as for Business Usage Service (where available) and for Business Message Rate Service (where available) as shown in PART 4, Section 2 of this tariff and of tariff ILL. C. C. No. 19, as appropriate. /12M/
- (2) Local Area Pay Service for the COPTS Coin Line is provided only in those exchanges where Business Usage Service or Business Message Rate Service is not available. Except as specified in this paragraph and in 1.1(B) (1) (b) preceding, usage rates are the same as for Local Area Service as shown in PART 4, Section 2 of this tariff and of tariff ILL. C. C. No. 19. /1FP/

<u>Per Mo.</u>
\$28.00
- (3) An additional charge of \$.10 per message is applicable to each sent-paid call for which the network provides coin rating and signaling on a time and distance sensitive basis. When the capability to bill the additional charge for rating and signaling on an actual basis is unavailable, the applicable charge is \$5.00 per month per line. /UGZ/
- (4) Where Business Usage Service is available, customers (COPTS Providers) may instead select to participate in the COPTS Optional Local Network Usage Plan in accordance with Paragraph 1.5 H. following.

H. COPTS Optional Local Network Usage Plan

- (1) The COPTS Optional Local Network Usage Plan ("Usage Plan") is a rate plan available to individual Customer Owned Pay Telephone Service Providers or to members of Customer Owned Pay Telephone Service Provider groups. A Customer Owned Pay Telephone Service Provider group is defined as a group consisting exclusively of customers who are properly authorized by the Illinois Commerce Commission to provide Customer Owned Pay Telephone Service including certificated public and private or private-use COPTS providers.
- (2) The Usage Plan is available for both basic COPTS lines and COPTS Coin lines.

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1. CUSTOMER OWNED PAY TELEPHONE SERVICE (cont'd)

1.5 Monthly Rates and Charges (cont'd)

H. COPTS Optional Local Network Usage Plan (cont'd)

- (3) If selected, this optional Usage Plan replaces the Local Business Usage Service rates otherwise applicable as described elsewhere in this tariff.
- (4) An individual COPTS customer or a COPTS customer group subscribing to this Usage Plan must commit to an annual minimum of \$900,000 in usage revenue, as calculated using the usage rates specified in Paragraph 1.5 H.(9) following. In order to qualify for the Usage Plan, the individual customer or customer group subscribing to this Plan must also have previously achieved a minimum of 80% of the commitment in equivalent usage (calculated using rates of this Usage Plan) in the preceding 12 months.
- (5) Revenues from all COPTS locations, within Ameritech-Illinois' service area, of a COPTS customer subscribing to this Usage Plan, or of a COPTS customer group as applicable, may be taken into account in determining whether the annual revenue commitment specified in paragraph 1.5 H.(4) above has been satisfied. It is the responsibility of the customer or customer group to identify in writing, for Ameritech-Illinois, the COPTS service locations to be included in the Usage Plan.
- (6) The usage revenues for the individual COPTS customer or COPTS customer group subscribing to this Usage Plan will be reviewed against the annual revenue commitment, specified in 1.5 H.(4) above, on an annual basis.
- (7) If the minimum annual revenue commitment has not been met, the Usage Plan will be discontinued and the customer or each member of the customer group, as applicable, will be retroactively billed for the difference between the actual usage rates charged and the usage rates which would have otherwise been applicable under the Local Business Usage rate schedule specified elsewhere in this tariff.
- (8) If participation in the Usage Plan is terminated at any time prior to meeting the annual revenue commitment specified in 1.5 H.(4) above, the customer will be liable for the difference between the actual usage rates billed under the Usage Plan and the usage rates which would have otherwise been applicable under the Local Business Usage rate schedule specified elsewhere in this tariff.

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1. CUSTOMER OWNED PAY TELEPHONE SERVICE (cont'd)

1.5 Monthly Rates and Charges (cont'd)

H. COPTS Optional Local Network Usage Plan (cont'd)

(9) Usage Schedule

Usage traffic is charged in accordance with the following three network usage bands:

Area of Current Band	Initial & Subsequent Time Period	Peak Initial Period Charge	Peak Subsequent Period Charge	Shoulder Peak Charge	Off Peak Charge
A	1 minute	\$.0182	\$.0047	90% of peak	60% of peak
B	Refer to PART 4, Section 2, I.C.C. No. 19				
C	Refer to PART 4, Section 2, I.C.C. No. 19				

Peak period rates are applicable for calls between 9:00 a.m. and *11:00 a.m., and between 2:00 p.m. and *8:00 p.m., Monday through Friday. Discount period rates are applicable as follows: Shoulder Peak for calls between 8:00 a.m. and *9:00 a.m., 11:00 a.m. and *2:00 p.m., 8:00 p.m. and *9:00 p.m., Monday through Friday, Off Peak for calls between 9:00 p.m. and *8:00 a.m., Monday through Friday, and 9:00 p.m. Friday through *8:00 a.m. Monday. Calls overlapping these periods will be rated as specified in (a) through (d) following.

*Up to but not including

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1. CUSTOMER OWNED PAY TELEPHONE SERVICE (cont'd)

1.5 Monthly Rates and Charges (cont'd)

H. COPTS Optional Local Network Usage Plan (cont'd)

(9) Usage Schedule (cont'd)

Initial Period, Subsequent Period, Discount Period

- (a) Initial period charges in H.(9) above are for the initial period connection, or any fraction thereof.
- (b) All subsequent period charges in H.(9) above are for each subsequent minute, or fraction thereof, that the connection continues beyond the initial period.
- (c) Discount rates specified in H.(9) above are expressed as a percent of the charge calculated at peak period rates, and are applied to the calls occurring within the rate discount period. The discount is applied to the sum of the initial period and subsequent minute charges for the call. The discount is computed separately for charges in each rate period and the results are then totaled. Discounts are not applicable to Operator-Assisted Call surcharges specified elsewhere in this tariff.
- (d) On Christmas Day (December 25), New Year's Day (January 1), Independence Day (July 4), Labor Day and Thanksgiving Day, or the resultant legal holiday, the applicable rating is the Off Peak Discount Period Rating.

I. Call Screening and Blocking where equipment is available.

Calls to 0, 611, Directory Assistance and 9-1-1 (where available) can be made regardless of the availability of Call Screening or selection of Blocking. All COPTS Coin Lines are equipped with 900 Special Access Code Blocking and 976 Prefix Blocking as described in PART 8, Section 2, Paragraphs 1 and 2 of this tariff. All lines are equipped with Incoming Screening and Outgoing Screening, as described below.

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1. CUSTOMER OWNED PAY TELEPHONE SERVICE (cont'd)

1.5 Monthly Rates and Charges (cont'd)

I. Call Screening and Blocking where equipment is available (cont'd)

	<u>I.N.C.</u>	<u>Per Mo.</u>
(1) Incoming Screening - Prevents collect or third number calls that are placed through a Company operator from being billed to the line, and provides incoming screening designation associated with the line in the Company's Line Identification Data Base (LIDB) for access by other service providers. (required)	N.C.	N.C.
(2) Incoming Blocking - Blocks all incoming calls; provides outgoing service only (optional). /PSEB1/	\$20.00	\$2.00
(3) Outgoing Screening - Calls through a Company operator shall be restricted to those charged to the called number, a third number or calling card. Calls forwarded to an interexchange carrier via Feature Group D Access Service, where the carrier has ordered the Calling Billing Number Delivery (Automatic Number Identification) Optional feature, will include ANI Information Digits 07 (for a Basic COPTS Line) or 27 (for a COPTS Coin Line), which indicate a screened line. (required) /PSES0/	N.C.	N.C.
(4) Outgoing Blocking - Applicable to coinless lines only; restricts line to non-sent-paid (optional). /PSEB0/	20.00	2.00
(5) International Direct Distance Dialing (IDDD) Blocking - Capability to block outgoing IDDD calls (optional). /RBVXC/	*	N.C.

* This feature may only be purchased out of F.C.C. No. 2, Page 84.2, Paragraph 4.3(C).

ATTACHMENT B

AMERITECH COIN LINE INTERFACE SPECIFICATIONS

AMERITECH

AM TR-NIS-000095
Ameritech Coin Line Interface Specifications
Issue 1, June 1992

Ameritech
Ameritech Technical Reference

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Information Manager
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2000 W. Ameritech Center Drive, 3A43E
Hoffman Estates, IL 60196-1025

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1.0 GENERAL

This document describes the Network Interface (NI) specifications for the Ameritech Coin Line Service. Specifications are provided for a coin line interface as shown on Figure 1.

1.1 Coin Line Service

Coin Line Service is offered as a means to provide a public coin telephone service line to work with a properly equipped coin telephone set. This service will allow the third-party provider of public coin telephones to connect to the Ameritech operating company (AOC) coin control circuits in the local central office. The central office coin control circuits provide most of the coin control functions for the telephone set. Coin Line Service may not be available in all Ameritech central offices.

1.2 Change and Reissue

Changed contents or reissued documents will be noted in this section.

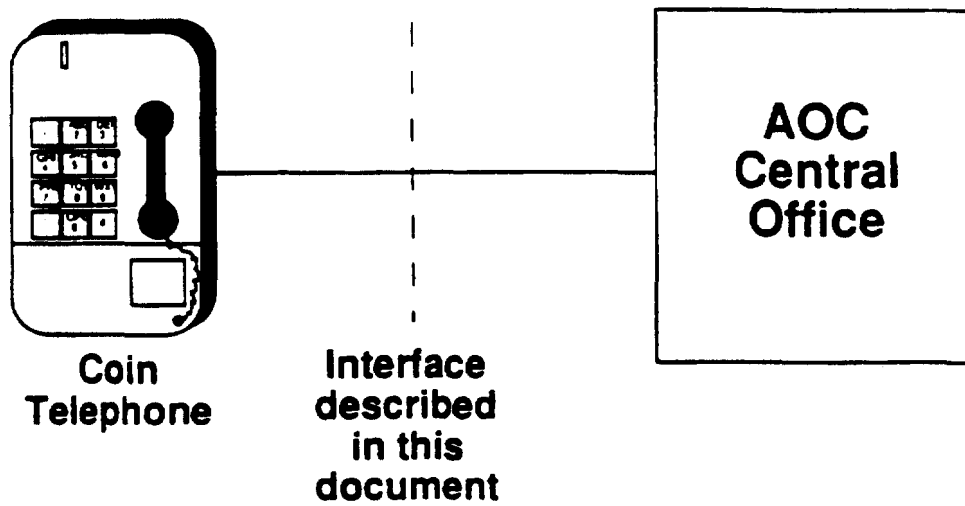


Figure 1
Coin Line Service

2.0 COIN LINE DESCRIPTION

Coin line service is provided to allow a calling customer to originate a call and to pay for the call at the coin telephone set.

The coin line service has the following features:

- Dial Tone First
- Local Coin with Overtime
- Coin Overtime Announcement
- Automatic Coin Toll Service (ACTS)
- Touch Tone
- Loop Start Operation
- Touch Tone Fraud Prevention

2.1 Dial Tone First

The dial-tone-first option provides dial tone without an initial coin deposit. This option not only demonstrates the operational status of the coin station but also permits customers to dial certain calls without requiring an initial coin deposit. These include assistance calls to the operator, station-to-station toll calls, person-to-person calls, collect calls, credit card calls, toll information calls and three-digit service codes. When dialing a number with no deposit required, the number can be dialed immediately after dial tone is received and the call is allowed to proceed. When dialing a number that requires a deposit, the initial deposit should be made and the desired number dialed. When a deposit is required and the calling coin customer completes dialing without depositing the initial rate, a recording directs the customer to hang up and try the call again after first depositing the necessary coin(s).

2.2 Local Coin Call with Overtime

In areas with overtime charging, a local coin call is divided into two distinct periods: initial and overtime. The initial period begins after the called party answers. Between 24 and 30 seconds prior to the end of the initial period, the initial deposit is automatically collected by the network. (Customer hears movement of coins.) The sound of coins being collected is an indication to the coin customer that the initial period is near completion and that the customer must either hang up or make an overtime deposit in order to continue uninterrupted.

If the coin has not been deposited at the end of the initial period, an announcement prompts the coin customer for the overtime deposit. If the deposit cannot be obtained, the network will disconnect the call.

2.3 Automated Coin Toll Service (ACTS)

The implementation of the ACTS feature has no effect on the present customer procedures required for a coin toll call. Upon receipt of dial tone the customer dials one plus the 7- or 10-digit called number. The customer receives an announcement stating the required charges and then deposits the correct amount of coins. After the required rate has been deposited, the call is permitted to proceed. Upon approaching the end of the initial period the initial deposit is automatically collected by the network. An announcement may be sent to inform the customer the initial period is ending. The announcement asks the customer if he (she) wishes to continue the call, to signal by flashing the switch hook when the call is completed.

If the customer hangs up within the prescribed interval, no further charges will be due. If the call goes into overtime, the customer signals by flashing the switch hook or hangs up to indicate when the call is over. If the customer hangs up, the operator system recognizes the hang-up and signals the local network to ring back the station. When the calling customer answers, an announcement is transmitted concerning the overtime charges due. When the charge has been satisfied, the operator system acknowledges, collects the deposit, and restores the circuits to normal.

2.4 Touch Tone

Ameritech Coin Line Service supports receipt of Touch Tone (Dual Tone Multi-Frequency) dialed digits.

2.5 Loop Start Operation

Loop start line origination is supported by Ameritech Coin Line Service.

2.6 Touch Tone Fraud Prevention

Touch tone fraud prevention is available with the dial-tone-first feature. Touch tone fraud prevention provides positive battery from the local network which can be used to disable the key pad during operator system functions. In addition, this function allows operator and ACTS recognition of overtime deposits less than the initial rate.

3.0 COIN LINE SIGNALING PROTOCOL

3.1 General

This section deals with the electrical characteristics of the coin line at the network interface. The coin line is a 2-wire, analog, local exchange line with a coin class of service. The coin line network interface supports MF signaling between the coin telephone and the local network. References to these characteristics can be found as indicated in the text and in the following references: Bellcore Document TR-TSY-000456 (Section 4), LSSGR - TR-TSY-000506, TR-NWT-000506 and EIA Standard 470-A in the reference section of this document.

3.2 Signaling

This section identifies the various signals sent from the coin telephone set to the local exchange network and from the local exchange network to the telephone set. These signals pertain to the loop-start interface between the network and the coin telephone set.

For the Network Supervision, Dial Tone Detection, Flash Timing, Alerting and Address Signaling (DTMF) interface specifications, refer to documents ANSI T1.401-1988 and Bellcore Document TR-TSY-000456 (Section 4).

DTMF - Dual Tone Multi-Frequency (address signaling) is used with virtually all modern public terminals. This document pertains to DTMF tones; 1 through 0, * and #. Refer to TR-TSY-000456 and ANSI T1.401 - 1988 for the signaling specifications in the Reference section of this document.

Voice Transmission - Voice transmission characteristics are described in Bellcore Document TR-TSY-000456, EIA Standard 470-A, IEEE Standard 269-1983 and IEEE Standard 661-1979. These references are specified in the Reference section.

Flash - If the customer flashes the switch hook on an operator handled coin call, an "operator recall" signal is sent to the operator system for connection to an operator. Refer to LSSGR Section 6 - TR-TSY-000506 and TR-TSY-000528 for the interface specifications.

Coin Station Test Line - The Coin Station Test Line option allows installation or repair forces to make the following operational tests without using the local test desk facilities or requiring the services of an operator.

- Coin presence and ground removal
- Ground and loop resistance
- Loop leakage
- Coin collect
- Coin return
- Coin relay operating time
- Foreign EMF

These tests are initiated at the coin telephone set under test by depositing the initial rate and dialing a local telephone number. Test results are returned to the repair personnel in the form of tones, beeps or rings. Contact the local Ameritech operating company for details.

Network Integrity - The requirements outlined here pertain to terminal characteristics that, if improper, could degrade network performance. Public terminals should be capable of meeting selected requirements contained in Title 47, Part 68, Subpart D of the US Government Code of Federal Regulations.

Customer Signaling - The signals that the customer generates in using this feature is in making 0+, 0- or 1+ calls. Only the usual information signaling (dial tone, audible ringing, etc.) is returned to the coin customer. Refer to document LSSGR Section 5 - TR-TSY-000505 and LSSGR Section 6 - TR-TSY-000506.

3.3 Coin Operation Signalling

This section covers the functions that enable the coin telephone set to accept coin as payment for telecommunications services. These requirements pertain to the loop-start, dial tone first, coin line (network interface) that involves a local exchange line that is assigned a "coin" class of service. The coin telephone set must be compatible with the network controlled coin control service specified in this technical reference.

Capabilities of the interface to the local switch include the ability to distinguish between valid and nonvalid coins, to confirm to the network that the initial or overtime coin deposits have been made, to inform the network of the number and denomination of the coins deposited and to respond to network signals for the collection or returning of coins.

Line Polarity - In the coin telephone set's idle or on-hook state, the network provides battery poled negative on the ring lead with respect to the tip lead. This polarity is continued after the telephone set is off-hook and draws line current. Refer to LSSGR Section 6.2 - TR-TSY-000506.

Coin Deposit Tests - On coin calls, an initial coin deposit is required for call completion. The network tests for the initial coin deposit and overtime deposits and coin presence with negative voltages (for initial deposit) and positive voltage (for overtime deposit) applied to the tip lead. Prior to the overtime deposit test, a minimum of 600 milliseconds of talking battery reversal is applied to the ring lead with ground on the tip lead. These test requirements are described in Bellcore Document TR-TSY-000456 - Section 5, TR-TSY-000528 and LSSGR Section 6 - TR-TSY-000506.

Coin Disposal - The coin telephone set should respond to the coin disposal control signals generated by the local network. The coin disposal cycle starts when the network opens the ring lead and applies negative or positive 130 (125 to 135 volts) between the tip lead and ground. This -130 volts and +130 volts may be reversed in different local central offices. For example, one local central office may have -130 volts as coin collect and +130 volts as coin return and another local central office may have +130 volts as coin collect and -130 volts as coin return. Coin telephone installation forces should call the local Ameritech operating company for the correct voltage polarity designation. Refer to Bellcore Document TR-TSY-000528, TR-TSY-000456 - Section 5 and LSSGR Section 6.2 - TR-TSY-000506 for coin disposal information.

Coin Signaling - Coin signals comprise a number of bursts of a two-frequency tone for coin designation. Refer to Bellcore Document TR-TSY-000528 and TR-TSY-000456, Section 5, for coin signaling information.

Stuck Coin - A stuck coin condition exists when a coin fails to respond to a coin disposal action. Requirements for the stuck coin test are identified in LSSGR Section 6.2 - TR-TSY-000506 and TR-TSY-000456.

3.4 Operator Systems Coin Signaling

This section describes the operator coin signaling functionality for the following functions: coin return, coin collect, ringback, operator attached, operator released and operator release/coin collect. These signals consist of a pair of in-band MF tones transmitted simultaneously from the operator system to the local central office. Refer to documents LSSGR Section 5 - TR-TSY-000505, TR-TSY-000528 and TR-TSY-000456.

Coin Collect and Coin Return - Coin collect and coin return signals are generated at the operator system, as in-band MF tones to signal the local central office for disposition of the coins via negative and positive 130 volts.

Ringback - The ringback signal indicates to the local network that ringing current should be applied to the line.

Operator Released - The operator released signal indicates that monitoring for coins has been completed and this condition may be used to enable the dial pad for further use. The local network should apply negative 48 volts to the ring lead for the operator released condition. These signals may be required to implement new service that requires end-to-end signaling.

Operator Attached - The operator attached signal indicates that the operator is monitoring for coins and this condition may be used to disable the dial pad. The operator attached condition causes positive 48 volts to be applied to the line. This signal may be required to prevent red box fraud.

Coin Collect/Operator Released - The coin collect/operator released signal indicates that the monitoring of coin deposits has been completed and that a coin collect action should be performed at the local central office. When this signal is received, the local network performs a coin collect (130 volts) and then an operator release, which connects negative 48 volts.

4.0 POWER

This document pertains to the characteristics of line power from the local telephone network. Line power derives DC voltage from sources in the local network. Refer to Bellcore Document TR-TSY-000456, Sections 4 and 8, for coin telephone power information.

5.0 REFERENCES

ANSI Documents:

Interface Between Carriers and Customer Installations - Analog Voicegrade Switched Access Lines Using Loop-Start and Ground Start Signaling, ANSI T1.401-1988, American National Standards Institute (ANSI).

Bellcore Technical Documents:

LATA Switching System Generic Requirements, Section 5, Call Processing, TR-TSY-000505

LATA Switching System Generic Requirements, Section 6, Signaling, TR-TSY-000506

LATA Switching System Generic Requirements, Section 6, Signaling, TR-NWT-000506

LATA Switching System Generic Requirements, Section 7, Transmission, TR-TSY-000507

LATA Switching System Generic Requirements, Section 10, System Interfaces, TR-TSY-000510

LATA Switching System Generic Requirements, Coin and Coin Charge-a-Call, TR-TSY-000528

Public Terminals Generic Requirements, TR-TSY-000456

Lightning, Radio Frequency and 60-Hz Disturbances at the Bell Operating Company Network Interface - TR-EOP-000001

General Requirements for Radio Frequency Interference Filters, TR-NWT-001048

EIA Document:

Telephone Instruments With Loop Signaling For Voiceband Applications, EIA Standard 470-A, Electronics Industries Association (EIA).

IEEE Document:

Method for Measuring Transmission Performance of Telephone Sets, IEEE Standard 269-1988, Institute of Electrical and Electronic Engineers (IEEE).

US Government Document:

Code of Federal Regulation - Telecommunications, Title 47 - Part 68, US Government

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